



DEFENSE INFORMATION SYSTEMS AGENCY

P. O. BOX 549
FORT MEADE, MARYLAND 20755-0549

IN REPLY
REFER TO: Joint Interoperability Test Command (JTE)

11 Aug 14

MEMORANDUM FOR DISTRIBUTION

Revision 2

SUBJECT: Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 8

References: (a) Department of Defense Instruction 8100.04, "DoD Unified Capabilities (UC)," 9 December 2010
(b) DoD CIO, Memorandum, "Interim Guidance for Interoperability of Information Technology (IT) and National Security Systems (NSS)," 27 March 2012
(c) through (f), see Enclosure

1. **Certification Authority.** References (a) and (b) establish the Joint Interoperability Test Command (JITC) as the Joint Interoperability Certification Authority for the UC products.

2. **Conditions of Certification.** The Cisco ESC 8; hereinafter referred to as the System Under Test (SUT), meets the critical requirements of the Unified Capabilities Requirements (UCR), Reference (c), and is certified for joint use as an ESC in Type 1, 2, and 3 environments and as a Local Session Controller (LSC) with the conditions described in Table 1. This certification expires upon changes that affect interoperability, but no later than 27 June 2017, which is three years from the date of the original UC Approved Products List (APL) memorandum. Desktop Review (DTR) 1 was requested to update the SUT Video Communication Server (VCS) software from x7.2.2 to x8.1.1. See paragraph 4 test details.

Table 1. Conditions

Condition	Operational Impact	Remarks
UCR Waivers		
None.		
Conditions of Fielding		
The SUT video end instruments include H.323 proprietary ROUTINE only end instruments depicted in Table 4. Additionally the SUT includes a Jabber client that offers video and voice; however, the Jabber client is certified for audio only as a soft phone and for XMPP IM&P as an XMPP client.		
Open Test Discrepancies		
Per the vendor's LoC, the SUT does not display weighted Terminal Coupling Loss (TCLw) and equipment impairment factor in their call detail record (CDR).	Minor	See note 1.
Per the vendor's LoC, the does not fully meet separate video and voice ASAC counts.	Minor	See note 1.
The SUT does not properly handle signaling events when setting up an inter-switch V.150 secure call with Avaya Communication Manager (CM) 6.0.	Minor	See note 2.

Table 1. Conditions (continued)

Condition	Operational Impact	Remarks
Per the vendor's LoC, the SUT proprietary video EI does not provide the ability to enable or disable the transmission destination unreachable msg.	Minor	See note 1.
Per the vendor's LoC, the SUT fails to immediately divert all precedence above routine calls placed to ROEIs. The SUT diverts only when the ROEI is busy if it is idle it will offer the call and divert if not answered.	Minor	See note 1.
During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes.	None	See note 3.
The SUT fails to answer with correct payload number per RFC 3264. Instead, of responding to the V.150.1 payload numbers in an SDP, offer the SUT always responds with payload number of 118 and 120 for State Signaling Events (SSE) and Simple Packet Relay Transport (SPRT) respectively which prevents successful secure call attempts.	Minor	See note 2.
Per the vendor's LoC, the SUT does not support an AS-SIP ESC to EI signaling interface.	Minor	See note 2.
Per the vendor's LoC, the SUT supports Primary Rate Interface requirement to be in compliance with ANSI T1.619-1992 and T1.619a-1994 with following exception, NFAS is not supported.	Minor	See note 1.
Per the vendor's LoC, the SUT does not support Public Key Infrastructure Requirement IA-049030.	Minor	See note 4.
Per the vendor's LoC, the SUT does not support Confidentiality requirement IA-069040.	Minor	See note 4.
The SUT 9951/9971 voice/video SIP ROEIs do not fully support inter-enclave hold feature while video enabled.	Minor	See note 5.
Per the vendor's LoC, the SUT does not support a persistent TLS connection between AEIs and the enclave fronted SBC because the SUT does not support AEIs.	Minor	See note 2.
Per the vendor's LoC, the SUT video conferencing system does not support all required audio codecs. The SUT does not support the G.723.1 audio codec.	Minor	See note 1.
Per the vendor's LoC, the SUT partially complies to the EDS gateway requirements per SCM-005300.	Minor	See note 6.
When the SUT MCU 5320 places an outbound video call to other SUT C90 and SX20 video endpoints in either environment 1 or environment 2, the call drops at exactly 15 minutes.	Minor	See note 2.
The SUT is not able to establish two-way video calls to the Vidyo UCCS or Polycom RMX/Group Series.	Minor	See note 2.
Per the vendor's LoC, the SUT does not correctly respond to stream errors. Instead of responding with a stream error and closing the stream, the server terminates the connection non-gracefully.	Minor	See note 2.
Per the vendor's LoC, the SUT does not generate a new Client-to-Server Stream. Server reuses the old stream ID instead of generating a new stream ID.	Minor	See note 2.
Per the vendor's LoC, the SUT does not include empty element in its advertisement of the SASL.	Minor	See note 7.
Per the vendor's LoC, the SUT does not fully comply with SASL failure requirements. The SUT does not comply with requirements IM-000710, IM-000720, and IM-000730.	Minor	See note 2.
Per the vendor's LoC, the SUT does not fully meet deleting a roster item requirement. The SUT does not comply with requirements IM-001310 and IM-001320.	Minor	See note 2.
Per the vendor's LoC, the SUT partially complies with rules for Server Processing of Outbound Subscription Requests. The SUT does not comply with requirement IM-001350. Server sends presence type "unsubscribed" with status Not Found.	Minor	See note 2.
Per the vendor's LoC, the SUT partially complies with the rules for server processing of outbound subscription cancellation. The SUT partially complies with requirement IM-001500. Upon receiving the outbound subscription cancellation, the contact's server does not send a presence stanza of type "unavailable" from all of the contacts online resources to the user.	Minor	See note 1.
Per the vendor's LoC, the SUT partially complies with the rules for server processing of inbound unsubscribe. The SUT partially complies with requirement IM-001540.	Minor	See note 1.
Per the vendor's LoC, the SUT does not comply with server generation of inbound presence probe.	Minor	See note 2.
The SUT Unified Presence Server establishes SASL external authentication with the incorrect domain name.	Minor	See note 2.
The SUT does not comply to the requirements in XMPP Extension XEP-0045 (multi-user chat). The SUT does not host or participate in multi-user chat/chat rooms as required by the reference.	Minor	See note 2.
The SUT Jabber Video Client when calling the Polycom Group series video EI has 1-way audio.	Minor	See note 8.

Table 1. Conditions (continued)

Condition	Operational Impact	Remarks	
The SUT does not support Local RTS Database (LRDB).	Minor	See note 1.	
The SUT does not support Master RTS Database (MRDB).	Minor	See note 1.	
NOTES: 1. DISA has adjudicated this discrepancy as minor and stated the intent to change this requirement in the next version of the UCR. 2. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. 3. During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes. This discrepancy was fixed and successfully tested with DTR 1, which included VCS software release x8.1.1. 4. DISA has adjudicated this discrepancy as minor and stated the intent to remove this requirement from the UCR and apply it to a DoD STIG. 5. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. In addition, the 9951/9971 voice/video SIP ROEI is not covered under this certification. 6. This discrepancy applies only to the SUT configured as an ESC. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. 7. DISA has adjudicated this discrepancy as minor. 8. DISA has adjudicated this discrepancy as minor with the condition of fielding that Jabber client is certified for audio only as a soft phone and for XMPP IM&P as an XMPP client.			
LEGEND:			
AEI	AS-SIP End Instrument	PEI	Proprietary End Instrument
ANSI	American National Standards Institute	POA&M	Plan of Action and Milestones
ASAC	Assured Services Admission Control	RFC	Request for Comments
AS-SIP	Assured Services Session Initiation Protocol	ROEI	ROUTINE Only End Instrument
CUPS	Cisco Unified Presence Server	SASL	Simple Authentication and Security Layer
DISA	Defense Information System Agency	SBC	Session Border Controller
DN	Directory Number	SDP	Session Description Protocol
DTR	Desktop Review	SIP	Session Initiation Protocol
EDS	Enterprise Directory Services	SUT	System Under Test
EI	End Instrument	STIG	Security Technical Implementation Guide
ESC	Enterprise Session Controller	TLS	Transport Layer Security
ID	identification	UC	Unified Capabilities
IM/P	Instant Messaging/Presence	UCCS	Unified Capabilities Conference Server
LoC	Letter of Compliance	UCR	Unified Capabilities
MCU	Multipoint Control Unit	VCS	Video Communication Server
NFAS	Non Facility Associated Signaling	XMPP	Extensible Messaging and Presence Protocol

3. Interoperability Status. Table 2 provides the SUT interface interoperability status and Table 3 provides the Capability Requirements (CR) and Functional Requirements (FR) status. Table 4 provides the UC APL product summary.

Table 2. Interface Status

Interface	Threshold CR/FR Requirements (See note.)	Status	Remarks
Network Management Interfaces			
10BaseT (R)	4, 6, 9, 13, 16, 20, 21, 23, 24	Certified	The SUT met the critical CRs and FRs for the IEEE 802.3i interface.
100BaseT (R)	4, 6, 9, 13, 16, 20, 21, 23, 24	Certified	The SUT met the critical CRs and FRs for the IEEE 802.3u interface.
1000BaseT (C)	4, 6, 9, 13, 16, 20, 21, 23, 24	Certified	The SUT met the critical CRs and FRs for the IEEE 802.3ab interface.

Table 2. Interface Status (continued)

Interface	Threshold CR/FR Requirements (See note.)	Status	Remarks																																																																								
Network Interfaces (Line and Trunk)																																																																											
10BaseT (R)	1, 5, 6, 7, 8, 10, 11, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25	Certified	The SUT met the critical CRs and FRs for the IEEE 802.3i interface with the SUT PEIs and softphones.																																																																								
100BaseT (R)	1, 5, 6, 7, 8, 10, 11, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25	Certified	The SUT met the critical CRs and FRs for the IEEE 802.3u interface with the SUT PEIs and softphones.																																																																								
1000BaseT (R)	1, 5, 6, 7, 8, 10, 11, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25	Certified	The SUT met the critical CRs and FRs for the IEEE 802.3ab interface with the SUT PEIs and softphones.																																																																								
2-wire analog (R)	1, 8, 15, 17, 19, 20, 21, 22, 23	Certified	The SUT met the critical CRs and FRs for the 2-wire analog interface with the SUT 2-wire secure and non-secure analog instruments.																																																																								
ISDN BRI (C)	1, 8, 15, 17, 19, 20, 21, 22, 23	Not Tested	The SUT offers this interface; however, it was not tested because it does not support Assured Services and is not required for an ESC.																																																																								
Legacy Interfaces (External)																																																																											
10BaseT (C)	2, 3, 5, 6, 7, 8, 11, 13, 18, 20, 21, 23, 24, 25	Certified	The SUT met the critical CRs/FRs for IEEE 802.3i for the AS-SIP trunk.																																																																								
100BaseT (C)	2, 3, 5, 6, 7, 8, 11, 13, 18, 20, 21, 23, 24, 25	Certified	The SUT met the critical CRs/FRs for IEEE 802.3u for the AS-SIP trunk.																																																																								
1000BaseT (C)	2, 3, 5, 6, 7, 8, 11, 13, 18, 20, 21, 23, 24, 25	Certified	The SUT met the critical CRs/FRs for IEEE 802.3ab for the AS-SIP trunk.																																																																								
ISDN T1 PRI (ANSI T1.619a) (R)	3, 9, 12, 14, 22, 20, 21, 23	Certified	The SUT met the critical CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity.																																																																								
ISDN T1 PRI NI-2 (R)	3, 9, 12, 14, 22, 20, 21, 23	Certified	The SUT met the critical CRs/FRs. This interface provides PSTN connectivity.																																																																								
T1 CCS7 (ANSI T1.619a) (C)	3, 9, 12, 14, 20, 21, 22, 23	Not Tested	The SUT does not support this conditional interface.																																																																								
T1 CAS (C)	3, 9, 12, 14, 20, 21, 22, 23	Certified	The SUT met threshold CRs/FRs for DTMF.																																																																								
E1 PRI (ITU-T Q.955.3) (C)	3, 9, 12, 14, 20, 21, 22, 23	Certified	The SUT met the critical CRs/FRs. This interface provides OCONUS MLPP connectivity in ETSI-compliant countries.																																																																								
E1 PRI (ITU-T Q.931) (C)	3, 9, 12, 14, 20, 21, 22, 23	Certified	The SUT met the critical CRs/FRs. This interface provides OCONUS connectivity in ETSI-compliant countries.																																																																								
<p>NOTE: The SUT high-level CR and FR ID numbers depicted in the Threshold CRs/FRs column can be cross-referenced in Table 3. These high-level CR/FR requirements refer to a detailed list of requirements provided in Reference (d), Enclosure 3.</p> <p>LEGEND:</p> <table> <tr> <td>10BaseT</td><td>10 Mbps Ethernet</td> <td>ISDN</td><td>Integrated Services Digital Network</td> </tr> <tr> <td>100BaseT</td><td>100 Mbps Ethernet</td> <td>ITU-T</td><td>International Telecommunication Union - Telecommunication Standardization Sector</td> </tr> <tr> <td>1000BaseT</td><td>1000 Mbps Ethernet</td> <td>Mbps</td><td>Megabits per second</td> </tr> <tr> <td>ANSI</td><td>American National Standards Institute</td> <td>MLPP</td><td>Multi-Level Precedence and Preemption</td> </tr> <tr> <td>AS-SIP</td><td>Assured Services Session Initiation Protocol</td> <td>NI-2</td><td>National ISDN Standard 2</td> </tr> <tr> <td>BRI</td><td>Basic Rate Interface</td> <td>OCONUS</td><td>Outside the Continental United States</td> </tr> <tr> <td>C</td><td>Conditional</td> <td>PEI</td><td>Proprietary End Instrument</td> </tr> <tr> <td>CAS</td><td>Channel Associated Signaling</td> <td>PRI</td><td>Primary Rate Interface</td> </tr> <tr> <td>CCS7</td><td>Common Channel Signaling Number 7</td> <td>PSTN</td><td>Public Switched Telephone Network</td> </tr> <tr> <td>CR</td><td>Capability Requirement</td> <td>Q.931</td><td>Signaling Standard for ISDN</td> </tr> <tr> <td>DSN</td><td>Defense Switched Network</td> <td>Q.955.3</td><td>ISDN Signaling Standard for E1 MLPP</td> </tr> <tr> <td>DTMF</td><td>Dual Tone Multi-Frequency</td> <td>R</td><td>Required</td> </tr> <tr> <td>E1</td><td>European Basic Multiplex Rate (2.048 Mbps)</td> <td>SS7</td><td>Signaling System 7</td> </tr> <tr> <td>ESC</td><td>Enterprise Session Controller</td> <td>T1</td><td>Digital Transmission Link Level 1 (1.544 Mbps)</td> </tr> <tr> <td>ETSI</td><td>European Telecommunications Standards Institute</td> <td>T1.619a</td><td>SS7 and ISDN MLPP Signaling Standard for T1</td> </tr> <tr> <td>FR</td><td>Functional Requirement</td><td></td><td></td> </tr> <tr> <td>ID</td><td>Identification</td><td></td><td></td> </tr> <tr> <td>IEEE</td><td>Institute of Electrical and Electronics Engineers</td><td></td><td></td> </tr> </table>				10BaseT	10 Mbps Ethernet	ISDN	Integrated Services Digital Network	100BaseT	100 Mbps Ethernet	ITU-T	International Telecommunication Union - Telecommunication Standardization Sector	1000BaseT	1000 Mbps Ethernet	Mbps	Megabits per second	ANSI	American National Standards Institute	MLPP	Multi-Level Precedence and Preemption	AS-SIP	Assured Services Session Initiation Protocol	NI-2	National ISDN Standard 2	BRI	Basic Rate Interface	OCONUS	Outside the Continental United States	C	Conditional	PEI	Proprietary End Instrument	CAS	Channel Associated Signaling	PRI	Primary Rate Interface	CCS7	Common Channel Signaling Number 7	PSTN	Public Switched Telephone Network	CR	Capability Requirement	Q.931	Signaling Standard for ISDN	DSN	Defense Switched Network	Q.955.3	ISDN Signaling Standard for E1 MLPP	DTMF	Dual Tone Multi-Frequency	R	Required	E1	European Basic Multiplex Rate (2.048 Mbps)	SS7	Signaling System 7	ESC	Enterprise Session Controller	T1	Digital Transmission Link Level 1 (1.544 Mbps)	ETSI	European Telecommunications Standards Institute	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1	FR	Functional Requirement			ID	Identification			IEEE	Institute of Electrical and Electronics Engineers		
10BaseT	10 Mbps Ethernet	ISDN	Integrated Services Digital Network																																																																								
100BaseT	100 Mbps Ethernet	ITU-T	International Telecommunication Union - Telecommunication Standardization Sector																																																																								
1000BaseT	1000 Mbps Ethernet	Mbps	Megabits per second																																																																								
ANSI	American National Standards Institute	MLPP	Multi-Level Precedence and Preemption																																																																								
AS-SIP	Assured Services Session Initiation Protocol	NI-2	National ISDN Standard 2																																																																								
BRI	Basic Rate Interface	OCONUS	Outside the Continental United States																																																																								
C	Conditional	PEI	Proprietary End Instrument																																																																								
CAS	Channel Associated Signaling	PRI	Primary Rate Interface																																																																								
CCS7	Common Channel Signaling Number 7	PSTN	Public Switched Telephone Network																																																																								
CR	Capability Requirement	Q.931	Signaling Standard for ISDN																																																																								
DSN	Defense Switched Network	Q.955.3	ISDN Signaling Standard for E1 MLPP																																																																								
DTMF	Dual Tone Multi-Frequency	R	Required																																																																								
E1	European Basic Multiplex Rate (2.048 Mbps)	SS7	Signaling System 7																																																																								
ESC	Enterprise Session Controller	T1	Digital Transmission Link Level 1 (1.544 Mbps)																																																																								
ETSI	European Telecommunications Standards Institute	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1																																																																								
FR	Functional Requirement																																																																										
ID	Identification																																																																										
IEEE	Institute of Electrical and Electronics Engineers																																																																										

Table 3. SUT Capability Requirements and Functional Requirements Status

CR/FR ID	UCR Requirement (High-Level) (See note 1.)	UCR 2013 Reference	Status
1	Voice Features and Capabilities (R)	2.2	Partially Met (See note 2.)
2	Assured Services Admission Control (R)	2.3	Met
3	Signaling Protocols (R)	2.4	Met
4	Registration and Authentication (R)	2.5	Met
5	SC and SS Failover and Recovery (R)	2.6	Met
6	Product Interface (R)	2.7	Met
7	Product Physical, Quality, and Environmental Factors (R)	2.8	Met
8	End Instruments (including tones and announcements) (R)	2.9	Partially Met (See note 2.)
9	Session Controller (R)	2.10	Met
10	AS-SIP Gateways (C)	2.11	Met (See note 3.)
11	Enterprise UC Services (R)	2.12	Partially Met (See notes 2 and 4.)
12	Call Connection Agent (R)	2.14	Met
13	CCA Interaction with Network Appliances and Functions (R)	2.15	Met
14	Media Gateway (R)	2.16	Met
15	Worldwide Numbering & Dialing Plan (R)	2.18	Met
16	Management of Network Devices (R)	2.19	Partially Met (See note 2.)
17	V.150.1 Modem Relay Secure Phone Support (R)	2.20	Partially Met (See note 2.)
18	Requirements for Supporting AS-SIP Based Ethernet Devices for Voicemail Systems (C)	2.21	Not Tested
19	Local Attendant Console Features (O)	2.22	Not Tested
20	MSC and SSC (O)	2.23	Not Tested (See note 5.)
21	MSC, SSC, and Dynamic ASAC Requirements in Support of Bandwidth-constrained links (O)	2.24	Not Tested (See note 6.)
22	Other UC Voice (R)	2.25	Partially Met (See note 2.)
23	Information Assurance Requirements (R)	4	Partially Met (See notes 2 and 6.)
24	IPv6 Requirements (R)	5	Partially Met (See note 2.)
25	Assured-Services (AS) Session Initiation Protocol (SIP) (AS-SIP 2013) (R)	AS-SIP	Partially Met (See note 2.)
NOTES: 1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Enclosure 3. 2. The SUT met the requirements with the exceptions noted in Table 1. DISA adjudicated these exceptions as minor. 3. During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes. This discrepancy was fixed and successfully tested with DTR 1, which included VCS software release x8.1.1. 4. These requirements apply specifically to an Enterprise Session Controller. 5. This optional requirement applies specifically to a Local Session Controller. 6. Security is tested by DISA-led Information Assurance test teams and the results published in a separate report, Reference (f). LEGEND: AS-SIP Assured Services Session Initiation Protocol O Optional C Conditional PEI Proprietary End Instrument CCA Call Connection Agent R Required CR Capability Requirement SC Session Controller DISA Defense Information System Agency SS Softswitch DTR Desktop Review SUT System Under Test FR Functional Requirement UC Unified Capabilities ID Identification UCR Unified Capabilities Requirements IPv6 Internet Protocol version 6 VCS Video Communication Server			

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 8

Table 4. UC APL Product Summary

Product Identification			
Product Name	Cisco Enterprise Session Controller (ESC) 8		
Software Release	8		
UC Product Type(s)	Enterprise Session Controller (ESC) or Local Session Controller		
Product Description	Enterprise Session Controller for Type 1, 2, and 3 Environments or as a Local Session Controller		
Product Components (See note 1.)	Component Name (See notes 2 and 3.)	Version	Remarks
Unified Communications Manager	Cisco Unified Communications Manager	8.6	
Session Management Edition	Cisco Session Management Edition	8.6	
Unified Communications Manager	<u>Cisco Unified Communications Manager</u>	8.6	
Cisco Unity Connection	Cisco Unity Connection	8.6	
Cisco Unified Presence Server	Cisco Unified Presence Server	8.6	
Cisco Webex Meeting Server	Cisco Webex Meeting Server	2.0	
Cisco Meeting Place Servers	Cisco Meeting Place Servers	8.6	
E911 management system	RedSky E911 Management System	6.3.1	See note 4.
Interworking Gateway	IWG on 3925 ISR G2, IWG on 3925E ISR G2, <u>IWG on 3945 ISR G2</u> , IWG on 3945E ISR G2	IOS 15.2(4)M5	
Session Border Controller	SBC on 3925 ISR G2, SBC on 3925E ISR G2, <u>SBC on 3945 ISR G2</u> , SBC on 3945E ISR G2	IOS 15.2(4)M5	
Session Border Controller	<u>SBC on ISR 4451-X Router</u>	IOS-XE 3.11	
Session Border Controller	<u>SBC on ASR 1002</u> , SBC on ASR 1002-X, SBC on ASR 1004, SBC on ASR 1006	IOS-XE 3.11	
Voice Gateway	2901 ISR G2, 2911 ISR G2, 2921 ISR G2, 2951 ISR G2, 3925 ISR G2, 3925E ISR G2, <u>3945 ISR G2</u> , 3945E ISR G2	IOS 15.2(4)M5	
Analog Voice Gateway	VG350 Analog Voice Gateway	IOS 15.2(4)M5	
Jabber	Cisco Jabber for Windows	9.2	See note 5.
IP Phone	Unified IP Phone 6901	9.2.1	
IP Phone	Unified IP Phone 6911	9.2.1	
IP Phone	Unified IP Phone 6911	9.2.1	
IP Phone	Unified IP Phone 6921	9.2.1	
IP Phone	Unified IP Phone 6941	9.2.1	
IP Phone	Unified IP Phone 6945	9.2.1	
IP Phone	Unified IP Phone 6961	9.2.1	
IP Phone	Unified IP Phone 7821	10.1.1.9	
IP Phone	Unified IP Phone 7841	10.1.1.9	
IP Phone	Unified IP Phone 7861	10.1.1.9	
IP Phone	Unified IP Phone 7906G	9.3.1	
IP Phone	Unified IP Phone 7911G	9.3.1	
IP Phone	Unified IP Phone 7931G	9.3.1	
IP Phone	Unified IP Phone 7941G	9.3.1	
IP Phone	Unified IP Phone 7941G-GE	9.3.1	
IP Phone	Unified IP Phone 7942G	9.3.1	
IP Phone	Unified IP Phone 7945G	9.3.1	
IP Phone	Unified IP Phone 7961G	9.3.1	
IP Phone	Unified IP Phone 7961G-GE	9.3.1	
IP Phone	Unified IP Phone 7962G	9.3.1	
IP Phone	Unified IP Phone 7965G	9.3.1	

Table 4. UC APL Product Summary (continued)

Product Components (See note 1.)	Component Name (See notes 2 and 3.)	Version	Remarks																																				
IP Phone	Unified IP Phone 7970G	9.3.1																																					
IP Phone	Unified IP Phone 7971G	9.3.1																																					
IP Phone	Unified IP Phone 7975G	9.3.1																																					
IP Phone	Unified IP Phone Expansion Module 7915	Not Applicable																																					
IP Phone	Unified IP Phone Expansion Module 7916	Not Applicable																																					
IP Conference Phone	IP Conference Station 8831	9.3.3.5																																					
IP Phone	Unified IP Phone 8961	9.4.1																																					
IP Phone	Unified IP Phone 9951	9.4.1	See note 6.																																				
IP Phone	Unified IP Phone 9971	9.4.1	See note 6.																																				
IP Phone Expansion Module	Unified IP Color Key Expansion Module	Not Applicable																																					
Secure Phone	CIS Secure DTD-7965-TSGB	9.3.1																																					
Secure Phone	CIS Secure DTD-7962-TSG-01	9.3.1																																					
Secure Phone	CIS Secure DTD-7962-T2	9.3.1																																					
Secure Phone	Telecore 2151	2AE-00199-0301																																					
Video Teleconference	TelePresence Video Communication Server (VCS)	X8.1.1 (See note 7.)																																					
Video Teleconference	TelePresence QuickSet C20	TC7.1.1																																					
Video Teleconference	TelePresence Codec C40, TelePresence Codec C60, <u>TelePresence Codec C90</u>	TC7.1.1																																					
Video Teleconference	TelePresence EX60, TelePresence EX90	TC7.1.1																																					
Video Teleconference	TelePresence MX200, TelePresence MX300	TC7.1.1																																					
Video Teleconference	<u>TelePresence SX20 QuickSet</u> , TelePresence MX300 G2	TC7.1.1																																					
Video Teleconference	<u>TelePresence 5300 MCU</u>	4.4(1.68)																																					
Common Access Card/Single sign-on solution	<u>OpenAM</u>	9.5.5																																					
Common Access Card support for WebEx Meeting Server	Cisco ASA	8.4(3)																																					
NOTES: 1. The detailed component and subcomponent list is provided in Reference (d), Enclosure 3. 2. Components bolded and underlined were tested by JITC. The other components in the family series were not tested but are also certified for joint use. JITC certifies those additional components because they utilize the same software and similar hardware and JITC analysis determined them to be functionally identical for interoperability certification purposes. 3. A comprehensive list of supported hardware configurations can be found by selecting the "Cisco Unified Communications on the Cisco Unified Computing System" link at the following URL: www.cisco.com/go/swonly . 4. The SUT is certified with any RedSky E911 Management system or other E911 Management system listed on the UC APL and certified with the Cisco UCM. E911 management is not required for an LSC. 5. Jabber client is certified for audio only as a soft phone and for XMPP IM&P as an XMPP client. 6. The SUT 9951/9971 voice/video SIP ROEIs do not fully support inter-enclave hold feature while video enabled. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. In addition, the 9951/9971 voice/video SIP ROEI is not covered under this certification. 7. The VCS release was updated from x7.2.2 to x8.1.1 with DTR 1.																																							
LEGEND: <table> <tr> <td>APL</td><td>Approved Products List</td> <td>MCU</td><td>Multipoint Conference Unit</td></tr> <tr> <td>DISA</td><td>Defense Information System Agency</td> <td>POA&M</td><td>Plan of Action and Milestones</td></tr> <tr> <td>DTR</td><td>Desktop Review</td> <td>ROEI</td><td>ROUTINE Only End Instrument</td></tr> <tr> <td>G2</td><td>Generation 2</td> <td>SBC</td><td>Session Border Controller</td></tr> <tr> <td>IM/P</td><td>Instant Messaging/Presence</td> <td>SIP</td><td>Session Initiation Protocol</td></tr> <tr> <td>IP</td><td>Internet Protocol</td> <td>UC</td><td>Unified Capabilities</td></tr> <tr> <td>ISR</td><td>Integrated Services Router</td> <td>UCM</td><td>Unified Communications Manager</td></tr> <tr> <td>IWG</td><td>Interworking Gateway</td> <td>VCS</td><td>Video Communication Server</td></tr> <tr> <td>JITC</td><td>Joint Interoperability Test Command</td> <td>XMPP</td><td>Extensible Messaging and Presence Protocol</td></tr> </table>				APL	Approved Products List	MCU	Multipoint Conference Unit	DISA	Defense Information System Agency	POA&M	Plan of Action and Milestones	DTR	Desktop Review	ROEI	ROUTINE Only End Instrument	G2	Generation 2	SBC	Session Border Controller	IM/P	Instant Messaging/Presence	SIP	Session Initiation Protocol	IP	Internet Protocol	UC	Unified Capabilities	ISR	Integrated Services Router	UCM	Unified Communications Manager	IWG	Interworking Gateway	VCS	Video Communication Server	JITC	Joint Interoperability Test Command	XMPP	Extensible Messaging and Presence Protocol
APL	Approved Products List	MCU	Multipoint Conference Unit																																				
DISA	Defense Information System Agency	POA&M	Plan of Action and Milestones																																				
DTR	Desktop Review	ROEI	ROUTINE Only End Instrument																																				
G2	Generation 2	SBC	Session Border Controller																																				
IM/P	Instant Messaging/Presence	SIP	Session Initiation Protocol																																				
IP	Internet Protocol	UC	Unified Capabilities																																				
ISR	Integrated Services Router	UCM	Unified Communications Manager																																				
IWG	Interworking Gateway	VCS	Video Communication Server																																				
JITC	Joint Interoperability Test Command	XMPP	Extensible Messaging and Presence Protocol																																				

4. Test Details. The extension of this certification is based upon DTR 1. The original certification, documented in Reference (d), is based on interoperability testing, DISA

adjudication of open test discrepancy reports (TDRs), review of the vendor's Letters of Compliance (LoC), and DISA Certifying Authority (CA) Recommendation for inclusion on the UC APL. Testing was conducted under UCCO Tracking Number 1108301 from 11 July through 5 August 2011 on the SUT as an LSC. Additional testing of the LSC under UCCO Tracking Number 1108301 was conducted for Desktop Reviews and documented in extensions to the original certification. Testing was conducted from 7 April through 9 May 2014 on the Cisco UCM as an ESC. The data from the LSC test is included in this certification. The test procedures derived from the UCR Reference (c) using test procedures derived from Reference (e) were used to validate the deltas between a Local Session Controller (LSC) and an ESC. Review of the vendor's LoC was completed on 7 April 2014. DISA adjudication of outstanding TDRs was completed on 10 June 2014. Information Assurance testing was conducted by DISA-led Information Assurance test teams and the results are published in a separate report, Reference (f). This DTR was requested to update the SUT VCS software from x7.2.2 to x8.1.1 to demonstrate a fix for a TDR. This update was previously tested at JITC. During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes. This discrepancy was fixed and successfully tested with DTR 1, which included VCS software release x8.1.1. JITC reviewed this DTR and determined no additional testing is necessary. Additionally, DISA NS has approved this DTR without further IA testing. Therefore, JITC approves this DTR. Enclosure 2 provides a list of errata changes to this certification since the original signature date.

5. Additional Information. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Sensitive but Unclassified IP Data (formerly known as NIPRNet) e-mail. Interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/.gov users at <https://stp.fhu.disa.mil/>. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at <https://jit.fhu.disa.mil/>. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly from the Unified Capabilities Certification Office (UCCO), e-mail: disa.meade.ns.list.unified-capabilities-certification-office@mail.mil. All associated information is available on the DISA UCCO website located at <http://www.disa.mil/Services/Network-Services/UCCO>.

6. **Point of Contact (POC).** The JITC point of contact is Capt Jonathan Kim, commercial telephone (520) 538-5182, DSN telephone 879-5182, FAX DSN 879-4347; e-mail address jonathan.s.kim.mil@mail.mil; mailing address Joint Interoperability Test Command, ATTN: JTE (Capt Jonathan Kim) P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT is 1331201.

FOR THE COMMANDER:



for RIC HARRISON

Chief

Networks/Communications and UC Portfolio

2 Enclosures a/s

Distribution (electronic mail):

DoD CIO

Joint Staff J-6, JCS

USD(AT&L)

ISG Secretariat, DISA, JTA

U.S. Strategic Command, J665

US Navy, OPNAV N2/N6FP12

US Army, DA-OSA, CIO/G-6 ASA(ALT), SAIS-IOQ

US Air Force, A3CNN/A6CNN

US Marine Corps, MARCORSYSCOM, SIAT, A&CE Division

US Coast Guard, CG-64

DISA/TEMC

DIA, Office of the Acquisition Executive

NSG Interoperability Assessment Team

DOT&E, Netcentric Systems and Naval Warfare

Medical Health Systems, JMIS IV&V

HQUSAISEC, AMSEL-IE-IS

UCCO

ADDITIONAL REFERENCES

- (c) Office of the Department of Defense Chief Information Officer, "Department of Defense Unified Capabilities Requirements 2013, Errata 1," 1 July 2013
- (d) Joint Interoperability Test Command, Memo, JTE, "Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 8," 13 June 2014
- (e) Joint Interoperability Test Command, "Enterprise Session Controller (ESC) Test Procedures for Unified Capabilities Requirements (UCR) 2013," Draft
- (f) Joint Interoperability Test Command, "Information Assurance (IA) Findings Summary For Cisco ESC 8 (Tracking Number 1331201)," Draft

Joint Interoperability Certification Revision History

Revision	Date	Approved By	Comments
NA	16 September 2014	Joseph Schulte	This is the original Extension of the Joint Interoperability Certification.
1	14 January 2015	Joseph Schulte	<p>The following changes were made to remove Collaboration Prime 9.5 from the SUT. Collaboration Prime was not tested and is not covered under this certification.</p> <ul style="list-style-type: none"> • Memo, Page 6, Table 4: The entry for Collaboration Prime in the SUT table was deleted.
2	21 April 2015	Joseph Schulte	<p>The following changes were made to update the 79xx, 8961, and 99x1 IP phones and the 8831 IP Conference Station from version 9.2.1 to the version tested.</p> <ul style="list-style-type: none"> • Memo, Page 6, Table 4. The 79xx series IP phones were updated from version 9.2.1 to 9.3.1. • Memo, Page 7, Table 4. The 79xx series IP phones were updated from version 9.2.1 to 9.3.1. • Memo, Page 7, Table 4. The 8831 IP Conference Station was updated from version 9.2.1 to 9.3.3.5. • Memo, Page 7, Table 4. The 8961, 9951, and 9971 IP phones were updated from version 9.2.1 to 9.4.1.
LEGEND: IP Internet Protocol NA Not Applicable SUT System Under Test			